

PATENT COOPERATION TREATY

PCT

10/532646

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference AMS . P52408WO	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/EP 03/50836	International filing date (day/month/year) 14/11/2003	(Earliest) Priority Date (day/month/year) 15/11/2002
Applicant WESTERNGECO SEISMIC HOLDINGS LIMITED		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

2A, 2B

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50836

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G01V1/20 G01V1/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01V

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 333 897 B1 (WARDEBERG JORN ET AL) 25 December 2001 (2001-12-25) column 1, line 35 -column 2, line 15; figure 3	1-31
Y	US 3 660 809 A (PEARSON RAYMOND H) 2 May 1972 (1972-05-02) column 2, line 43 -column 3, line 8; figures 3,4	1-31
Y	US 4 725 990 A (ZIBILICH JR ANTHONY M) 16 February 1988 (1988-02-16) column 3, line 13 - line 50; figures 2,3	1-31
Y	US 6 041 282 A (WARDEBERG JOERN ET AL) 21 March 2000 (2000-03-21) column 1, line 57 -column 2, line 6	1-31
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
 "E" earlier document but published on or after the international filing date
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
 "O" document referring to an oral disclosure, use, exhibition or other means
 "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
 "&" document member of the same patent family

Date of the actual completion of the international search

6 May 2004

Date of mailing of the international search report

18.05.04

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50836

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 021 091 A (GAISER JAMES E) 1 February 2000 (2000-02-01) column 3, line 16 - line 47; figure 2 ---	1-31
A	US 4 491 939 A (CARPENTER ALLAN L) 1 January 1985 (1985-01-01) column 3, line 26 -column 4, line 2; figure 3 ---	1-31
A	US 6 108 267 A (PEARCE RICHARD E) 22 August 2000 (2000-08-22) column 4, line 45 -column 5, line 27; figure 1A ---	1-31
A	US 4 821 241 A (BERGLUND CARL O) 11 April 1989 (1989-04-11) column 3, line 62 -column 4, line 10; figure 2 ---	1-31
A	US 5 943 293 A (BRAHAM ROBERT M ET AL) 24 August 1999 (1999-08-24) column 3, line 28 -column 4, line 4; figures 1,2 ---	1-31
A	US 6 188 646 B1 (ERATH LOUIS ET AL) 13 February 2001 (2001-02-13) column 2, line 57 -column 3, line 26; figure 1 ---	1-31
A	US 6 477 111 B1 (BITTLESTON SIMON HASTINGS ET AL) 5 November 2002 (2002-11-05) column 3, line 62 -column 4, line 36; figure 3A -----	1-31

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/50836

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6333897	B1	25-12-2001	NO 982890 A GB 2338556 A ,B US 6510103 B1	20-12-1999 22-12-1999 21-01-2003
US 3660809	A	02-05-1972	CA 922013 A1 DE 2132033 A1 FR 2096795 A5 GB 1348401 A NL 7108997 A ,B	27-02-1973 13-01-1972 25-02-1972 20-03-1974 31-12-1971
US 4725990	A	16-02-1988	NONE	
US 6041282	A	21-03-2000	NO 972635 A GB 2327756 A ,B	10-12-1998 03-02-1999
US 6021091	A	01-02-2000	NONE	
US 4491939	A	01-01-1985	WO 8300564 A1 AU 554704 B2 CA 1195396 A1 DE 3271889 D1 DK 161483 A ,B, EP 0085072 A1 JP 4057992 B JP 58501289 T	17-02-1983 28-08-1986 15-10-1985 07-08-1986 13-04-1983 10-08-1983 16-09-1992 04-08-1983
US 6108267	A	22-08-2000	US 5883857 A	16-03-1999
US 4821241	A	11-04-1989	NONE	
US 5943293	A	24-08-1999	NONE	
US 6188646	B1	13-02-2001	NONE	
US 6477111	B1	05-11-2002	AU 762817 B2 AU 6357699 A BR 9915196 A CA 2346666 A1 CN 1324451 T DE 69913723 D1 EP 1123518 A1 WO 0026695 A1 ID 29481 A NO 20012146 A	03-07-2003 22-05-2000 07-08-2001 11-05-2000 28-11-2001 29-01-2004 16-08-2001 11-05-2000 30-08-2001 27-06-2001